Cold Weather Risk Management

Terminal Learning Objective

Action: Apply the Composite Risk Management (CRM) process and principles to cold weather operations or training

Condition: You are a small unit leader, in a training environment, given the USARAK Pamphlet 385-4, Risk Management Guide for Cold Weather Operations.

Standard: Apply the CRM process to given cold weather scenarios.

CRM Principles

- ***Integrate CRM into all phases of missions and operations.***
- ***Make risk decisions at the appropriate level.***
- ***Accept no unnecessary risk.***
- ***Apply the CRM process cyclically and continuously.***
- ***Do not be risk averse – identify and control hazards – then complete the mission.***

Composite Risk Management Process

1. ***Identify the hazards.***
2. ***Assess hazards.***
3. ***Develop controls and make risk decisions.***
4. ***Implement controls.***
5. ***Supervise and evaluate.***

Overview of Risk Management Guide

Section I: The Composite Risk Management Process

Section II: CRM examples for cold weather training events.

Appendices:

A. Planning Considerations for Cold Weather Training and Operations

B. Wind Chill Chart

C. 9 Line Medical Evacuation Request

D. Ahkio Packing List

E. Blank Copies of Matrix, Worksheet and DA Form 7566

F. Avalanche Hazards Worksheet

Identify and Assess Hazards

- ***Use METT-TC as the framework to identify hazards***
- ***Use regulations, accident data, AAR's, experience, subject matter experts, etc. to identify hazards.***
- ***Assess the hazards to determine risk level.***
- ***Ask yourself : What is the probability of the hazard occurring during the mission? What is the Severity if the hazard occurs? Is the risk level low, moderate, high or extremely high?***

OR

- ***Use the Risk Assessment Matrix for Cold Weather Operations to identify and assess hazards and determine the initial risk level.***

Risk levels

Use the cumulative score to determine the initial ris
CAVEAT: If any individual area (e.g. weather) receiv
high or extremely high risk, the overall initial risk le
high or extremely high even if the cumulative score
low or moderate risk

Individual Area	**1,2**	**3,4**	**5,6**	**7,8,9**
Risk Level	**Low risk**	**Moderate Risk**	**High Risk**	**Extremely High Risk**
Cumulative Score	**7 to 12**	**13 to 23**	**24 to 35**	**36 to 40**

Identify and Assess Hazards using the matrix and worksheet from USARAK Pam 385-4

Mission (Planning) SCORE:			
	Preparatory Time		
Guidance	Optimum	Adequate	Minimal
FRAGO	3	4	5
OPORD	2	3	4
OPLAN/MOI/POI	1	2	3

Mission (Command and Control) SCORE:			
	Event		
Task Organization	Support, Non-tactical, Garrison	Day Tactical	Night Tactical
Operational Control (OPCON)	3	4	5
Attached	2	3	4
Organic	1	2	3

Terrain SCORE:			
	Trafficability		
Type of Terrain	Optimum	Adequate	Minimal
Mountain*	3	4	5
Hills	2	3	4
Flat/ Rolling Terrain	1	2	3

Weather SCORE:				
Temperature (degrees F with wind chill)	Exposure Duration			
	< 8 hours	8-24 hours	24-72 hours	Over 72 hours
55 to 33	1	1	2	3
32 to 10	2	2	3	4
9 to -19	3	4	4	5
-20 to -40	5	6	7	8
Below -40	6	7	8	9
Hazardous weather conditions (blizzard,	6	7	8	9

Troops (Soldier Endurance) SCORE:			
	Soldier Preparation		
Environmental Preparation	Optimum	Adequate	Minimal
Non-acclimated	3	4	5
Partially acclimated	2	3	4
Acclimated	1	2	3

Troops (Soldier Selection) SCORE:				
	Soldier Experience			
Task	Extensive cold weather experience	CWI 2 / Some CW experience	CWI 1 / No CW experience	No cold weather training or experience
Complex	3	4	5	6
Routine	2	3	4	5
Simple	1	2	3	4

Troops (Rest and Maintenance) SCORE:			
	Equipment Status		
Personnel Rest Status	Optimum	Adequate	Minimal
<4 hours sleep in 24 hours	3	4	5
4-8 hours sleep in 24 hours	2	3	4
>8 hours sleep in 24 hours	1	2	3

Identify and Assess Hazards using the matrix and worksheet from USARAK Pam 385-4

Assessment Factors	***Identify and Assess Hazards***	***Score***	***Risk Level***
Mission (Planning)			
Mission (Command and Control)			
Terrain			
Weather			
Troops (Soldier Endurance)			
Troops (Soldier Selection)			
Troops (Rest and Maintenance)			
Additional Considerations			
		Total Score:_____	
Initial Risk Level:_____			

Develop Controls and Make Risk Decisions

- ***Address WHO, WHAT, WHEN, WHERE and HOW.***
- ***Use USARAK 385-4, Appendix A.***
- ***Use the RM worksheet examples in USARAK 385-4.***
- ***Reassess the risk after controls are in place.***
- ***Involve the appropriate level of command.***

Risk Level	**Low**	**Moderate**	**High**	**Extremely High**
Who can approve the mission or activity?	**Company Commander**	**Battalion Commander**	**Brigade Commander**	**Commanding General**

Implement Controls, Supervise and Evaluate

- ***Convert controls into execution orders.***
- ***Ensure controls are understood by all personnel.***
- ***Enforce risk controls to standard.***
- ***Designate personnel to supervise and evaluate controls.***
- ***Evaluate and make adjustments as necessary.***

Scenario 1

You have ten minutes to:

- ***Identify and assess the hazards using the risk assessment matrix and worksheet.***
- ***Determine the initial risk level for the scenario.***
- ***Be prepared to brief your results.***

Scenario 1: Initial Risk Level

Assessment Factors	Identify and Assess Hazards	Score	Risk Level
Mission (Planning)	MOI and 72 hours	1	
Mission (Command and Control)	Organic, Night tactical	3	
Terrain	Flat, Adequate with secondary roads	2	
Weather	-30 to -40° F, 8-24 hours	6	
Troops (Soldier Endurance)	Non-acclimated, Optimum	4	
Troops (Soldier Selection)	Routine, Some cold weather experience	3	
Troops (Rest and Maintenance)	About 8 hours, adequate	2	
Additional Considerations	There is a high risk of cold weather injury with the expected temperatures.		
		Total Score: 21	
Initial Risk Level: HIGH			

Scenario 2

You have fifteen minutes to:

- ***Apply the CRM process to this scenario.***
- ***Record your results on the DA Form 7566.***
- ***Be prepared to brief your results.***

Scenario 2: Initial Risk Level

Assessment Factors	Identify and Assess Hazards	Score	Risk Level
Mission (Planning)	FRAGO, Adequate	4	
Mission (Command and Control)	OPCON, Night tactical	5	
Troops (Soldier Endurance)	Acclimated, Adequate	2	
Mission and Troops (Troop to Task)	Complex, Highly qualified	3	
Weather	Wind chill to -35° F, 8-24 hours	6	
Terrain	Flat, Cross Country	2	
Troops (Rest and Maintenance)	About 6 hours, adequate	2	
Additional Considerations			
		Total Score: 26	
Initial Risk Level: HIGH			

1. Organization and Unit: Infantry Company		2. Page __1__ of __1__
3. Mission/Task: Operation Arctic Warlord Move to and Conduct Link-up to secure airfield	4. Date/Time Group Begin: 0500 End: 1500	5. Date Prepared:
6. Prepared by: (rank, name, duty position) CPT WHO		
7. Operational phase in which the mission/task will be conducted: Operation Arctic Warlord		

8. Identified Hazards	9. Assess the Hazards: Initial Risks:				10. Develop Control Measures for Identified Hazards: Specific measures taken to reduce the probability and severity of a hazard	11. Make Risk Decisions: Remaining risks:				12. How to Implement Controls: Include SOPs, references, written and verbal orders, etc.	13. Supervision and evaluation by: Continuous leader checks, buddy system, situation reports, etc.
	L	M	H	E		L	M	H	E		
Cold Weather Injuries			H		Temperature Zone IV guidelines for clothing and equipment All Soldiers start movement cool; 1 ahkio group per platoon; stripped of all but tent and stove equipment; rehearse link-up procedures to with 1st battalion to prevent Soldiers from becoming static at completion of movement; soldier load no more than 40 pounds (sleeping bags carried); remainder of equipment brought forward by SUSV; trail breaking element moves one hour prior, establishes and marks trail; slow rate of march for all Soldiers to prevent overheating		M			PCC/PCIs of cold weather clothing; equipment checks of skis and bindings; rehearsals of movement procedures and actions at halts; halts are less than 10 minutes to prevent Soldiers from becoming chilled Tent and Stove Drill rehearsed; guidelines from USARAK Pamphlet 385-4 utilized for Tent & Stove operations; medic conducts checks of Soldiers at established checkpoints; potential cold weather injuries are dealt with immediately	Medical personnel conduct frequent checks of personnel to mitigate problems before they become casualties Buddy up experienced personnel with new troops

14. Remaining Risk Level After Countermeasures are Implemented: (circle one) Battalion Commander
LOW (L) MODERATE (M) HIGH (H) EXTREMELY HIGH (E)

15. Risk Decision Authority Level: (approval authority signature block) Battalion Commander _____
If initial risk level is medium, high or extremely high, brief risk decision authority at that level on controls and countermeasure used to

Questions?

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